

10563045 - GAU: 1644

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Frank C. Eisenschenk

Frank C. Eisenschenk, Ph.D., Patent Attorney

INFORMATION DISCLOSURE  
STATEMENT

Examining Group 1646  
Patent Application  
Docket No. INN-133  
Serial No. 10/563,045

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : 1646  
Applicants : Alessandro Moretta, Mariella Della Chiesa  
Serial No. : 10/563,045  
Filed : December 30, 2005  
Conf. No. : 6062  
For : PAN-KIR2DL NK-Receptor Antibodies and Their Use in Diagnostik and Therapy

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 AND 1.98

Sir:

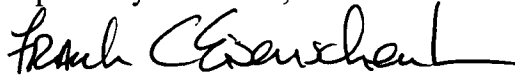
The patent application referred to above was filed in the U.S. Patent Office as a national application under 35 U.S.C. § 371. Applicants have been notified that a copy of the International Search Report has been made available in the national stage file as indicated on the Notice of Acceptance of the Application Under 35 USC 371 (Form PCT/DO/EO/903). The Notice does not indicate whether copies of the references cited in the International Search Report were received by the Patent Office. Therefore, copies of the references cited in the International Search Report are enclosed for the Examiner's convenience. However, Applicants have not submitted copies of the U.S. patents cited on attached Form PTO/SB/08 pursuant to 37 C.F.R. 1.98(a)(2)(ii). In accordance with 37 C.F.R. § 1.56, Applicants hereby request that the references cited in the International Search

Report and listed on the attached form PTO/SB/08 be made of record and considered in the examination of the subject application.

Applicants have also listed on form PTO/SB/08 numerous references which have not been cited in the International Search Report. Copies of these documents are enclosed with this Information Disclosure Statement. Applicants respectfully request that these references be made of record and considered in the examination of the subject application.

Applicants respectfully assert that the substantive provisions of 37 C.F.R. §§ 1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



Frank C. Eisenschenk, Ph.D.

Patent Attorney

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Attachments: Form PTO/SB/08; copies of cited references.



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PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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STATEMENT BY APPLICANT**

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Sheet

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of

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Attorney Docket Number

INN-133

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	U1	US-6,524,583	02-25-2003	THORPE <i>et al.</i>	All
	U2	US-5,650,491	07-22-1997	REED <i>et al.</i>	All
	U3	US-5,539,094	07-23-1996	REED <i>et al.</i>	All
	U4	US-5,660,827	08-26-1997	THORPE <i>et al.</i>	All
	U5	US-4,816,567	03-28-1989	CABILLY <i>et al.</i>	All
	U6	US-5,583,034	12-10-1996	GREEN <i>et al.</i>	All
	U7	US-			
	U8	US-			
	U9	US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	F1	WO 98/16551 A2	04-23-1998	GENENTECH, INC.	All	
	F2					
	F3					
	F4					
	F5					
	F6					
	F7					

Examiner  
Signature

Date

Considered

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Application Number	10/563,045
Filing Date	December 30, 2005
First Named Inventor	Alessandro Moretta
Group Art Unit	1646
Examiner Name	
Attorney Docket Number	INN-133

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R1	BARTEN, R. <i>et al.</i> "Divergent and convergent evolution of NK-cell receptors", <i>TRENDS in Immunology</i> , January 2001, pp. 52-57, Vol. 22, No. 1.	
	R2	BIASSONI, R. <i>et al.</i> "Human CD3 <sup>+</sup> CD16 <sup>+</sup> Natural Killer Cells Express the hGATA-3 T Cell Transcription Factor and an Unrearranged 2.3-kb TcR $\delta$ Transcript", <i>Eur. J. Immunol.</i> , 1993, pp. 1083-1087, Vol. 23.	
	R3	BOYINGTON, J. C. <i>et al.</i> "Crystal Structure of an NK Cell Immunoglobulin-like Receptor in Complex with its Class I MHC Ligand", <i>Nature</i> , June 1, 2000, pp. 537-543, Vol. 405.	
	R4	FAN, Q. R. <i>et al.</i> "Crystal Structure of the Human Natural Killer Cell Inhibitory Receptor KIR2DL1-HLA-Cw4 Complex", <i>Nature Immunology</i> , May 2001, pp. 452-460, Vol. 2, No. 5.	
	R5	FARAG, S. S. <i>et al.</i> "Natural Killer Cell Receptors: New Biology and Insights into the Graft-Versus-Leukemia Effect", <i>BLOOD</i> , September 15, 2002, pp. 1935-1947, Vol. 100, No. 6.	
	R6	GAUTHIER, L. <i>et al.</i> "p-Surrogate Light Chain Physicochemical Interactions of the Human PreB Cell Receptor: Implications for V <sub>H</sub> Repertoire Selection and Cell Signaling at the PreB Cell Stage", <i>The Journal of Immunology</i> , 1999, pp. 41-50, Vol. 162.	
	R7	KOH, C. Y. <i>et al.</i> "NK Inhibitory-Receptor Blockade for Purging of Leukemia: Effects on Hematopoietic Reconstitution", <i>Biology of Blood and Marrow Transplantation</i> , 2002, pp. 17-25, Vol. 8.	
	R8	MAENAKA, K. <i>et al.</i> "Crystal Structure of the Human p58 Killer Cell Inhibitory Receptor (KIR2DL3) Specific for HLA-Cw3-Related MHC Class I", <i>Structure</i> , April 1999, pp. 391-398, Vol. 7, No. 4.	
	R9	MORETTA, A. <i>et al.</i> "Activating Receptors and Coreceptors Involved in Human Natural Killer Cell-Mediated Cytolysis", <i>Annu. Rev. Immunol.</i> , 2001, pp. 197-223 and Table of Contents, Vol. 19.	
	R10	MORETTA, A. <i>et al.</i> "Identification of Four Subsets of Human CD3 <sup>+</sup> CD16 <sup>+</sup> Natural Killer (NK) Cells by the Expression of Clonally Distributed Functional Surface Molecules: Correlation between Subset Assignment of NK Clones and Ability to Mediate Specific Alloantigen Recognition", <i>J. Exp. Med.</i> , December 1990, pp. 1589-1598, Vol. 172.	
	R11	MORETTA, A. <i>et al.</i> "A Novel Surface Antigen Expressed by a Subset of Human CD3 <sup>+</sup> CD16 <sup>+</sup> Natural Killer Cells", <i>The Journal of Experimental Medicine</i> , March 1990, pp. 695-714, Vol. 171.	
	R12	MORETTA, A. <i>et al.</i> "P58 Molecules as Putative Receptors for Major Histocompatibility Complex (MHC) Class I Molecules in Human Natural Killer (NK) Cells. Anti-p58 Antibodies Reconstitute Lysis of MHC Class I-protected Cells in NK Clones Displaying Different Specificities", <i>J. Exp. Med.</i> , August 1993, pp. 597-604, Vol. 178.	

Examiner  
SignatureDate  
Considered

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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Application Number

10/563,045

Filing Date

December 30, 2005

First Named Inventor

Alessandro Moretta

Group Art Unit

1646

Examiner Name

/Marianne DiBrino/

Attorney Docket Number

INN-133

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R13	MORETTA, A. <i>et al.</i> "Receptors for HLA Class-I Molecules in Human Natural Killer Cells", <i>Annu. Rev. Immunol.</i> , 1996, pp. 619-648, Vol. 14.	
	R14	PENDE, D. <i>et al.</i> "Identification and Molecular Characterization of NKp30, a Novel Triggering Receptor Involved in Natural Cytotoxicity Mediated by Human Natural Killer Cells", <i>J. Exp. Med.</i> , November 15, 1999, pp. 1505-1516, Vol. 190, No. 10.	
	R15	RUGGERI, L. <i>et al.</i> "Effectiveness of Donor Natural Killer Cell Alloreactivity in Mismatched Hematopoietic Transplants", <i>Science</i> , March 15, 2002, pp 2097-2100, Vol. 295.	
	R16	SAUNAL, H. <i>et al.</i> "Mapping of Viral Conformational Epitopes Using Biosensor Measurements", <i>Journal of Immunological Methods</i> , 1995, pp. 33-41, Vol. 183.	
	R17	SAULQUIN, X. <i>et al.</i> "Crystal Structure of the Human Natural Killer Cell Activating Receptor KIR2DS2 (CD158j)", <i>J. Exp. Med.</i> , April 7, 2003, pp. 933-938, Vol. 197, No. 7.	
	R18	SHIN, J.-S. <i>et al.</i> "Monoclonal Antibodies with Various Reactivity to p58 Killer Inhibitory Receptors", <i>Hybridoma</i> , 1999, pp. 521-527, Vol. 18, No. 6	
	R19	SPAGGIARI, G. M. <i>et al.</i> "Soluble HLA Class I Induces NK Cell Apoptosis Upon the Engagement of Killer-Activating HLA Class I Receptors through FasL-Fas Interaction", <i>BLOOD</i> , December 1, 2002, pp. 4098-4107, Vol. 100, No. 12.	
	R20	WAGTMANN, N. <i>et al.</i> "Killer Cell Inhibitory Receptors Specific for HLA-C and HLA-B Identified by Direct Binding and by Functional Transfer", <i>Immunity</i> , December 1995, pp. 801-809, Vol. 3.	
	R21	WAGTMANN, N. <i>et al.</i> "Molecular Clones of the p58 NK Cell Receptor Reveal Immunoglobulin-Related Molecules with Diversity in Both the Extra- and Intracellular Domains", <i>Immunity</i> , May 1995, pp. 439-449, Vol. 2.	
	R22	WARREN, H.S. <i>et al.</i> "Functional analysis of CD158b monoclonal antibodies recognizing the killer Ig-like receptors KIR2DS2, KIR2DL2 and KIR2DL3", <i>Tissue Antigens</i> , 2000, pp. 80-81, Vol. 55, No. Supplement 15, XP009040899 (abstract only).	
	R23		
	R24		

Examiner Signature	/Marianne DiBrino/	Date Considered	06/15/2006
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